(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 8 January 2004 (08.01.2004)

PCT

(10) International Publication Number WO 2004/002319 A3

(51) International Patent Classification⁷: A61B 17/00

(21) International Application Number:

PCT/IL2003/000540

(22) International Filing Date: 26 June 2003 (26.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/391,599

27 June 2002 (27.06.2002) US

(71) Applicant and

(72) Inventor: SCHATZBERGER, Shaike [IL/IL]; 26 Moshe Sneh Street, 34 987 Haifa (IL).

(74) Agent: G. E. EHRLICH (1995) LTD.; 28 Bezalel Street, 52 521 Ramat Gan (IL).

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE

(utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

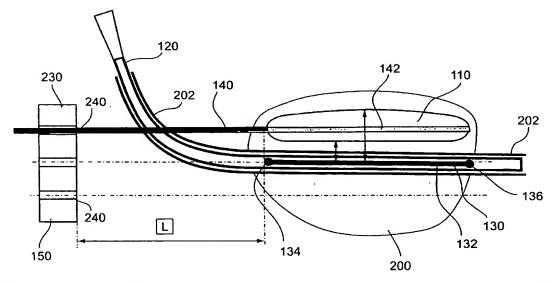
Published:

with international search report

(88) Date of publication of the international search report: 26 February 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR POSITIONING A SURGICAL INSTRUMENT



(57) Abstract: Presented are methods and apparatus for delivering a surgical instrument to a treatment site within the body of a subject, enabling accurate placement of surgical tools in areas not directly visible to a surgeon during a surgical procedure, while reducing or eliminating need for real-time imaging modalities to guide placement of those surgical tools. A treatment tool is guided to a treatment site by placing a guiding element at a reference site within a body of a subject, the reference site having a known spatial relationship to the treatment site, and utilizing a positioning tool to guide a treatment tool to a locus so positioned with respect to that guiding element that the spatial relationship between that guiding element and that locus is substantially similar to the spatial relationship known to exist between the reference site and the treatment site, thereby positioning the treatment tool substantially at the treatment site. Methods and apparatus for treatment of Benign Prostate Hyperplasia are also presented.



INTERNATIONAL SEARCH REPORT

International application No.

			PC1/1L03/00540	
A. CLASSIFICATION OF SUBJECT MATTER				
IPC(7) : A 61 B 17/00				
US CL : 606/1				
According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols)				
U.S. : 606/1-3, 20-26; 128/898				
Description accorded asker than minimum description to the amount shot much described as the Salda accorded				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
· ·				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
				Relevant to claim No.
Category *				
Y	US 5992419 A (STERZER et al.) 30 November 1999, entire document.			1-03
Y	US 5540655 A (EDWARDS et al.) 30 July 1996, entire document. 1-6			1-63
r	US 3340033 A (EDWARDS et al.) 30 July 1990, entire document.			1-03
Y	US 5480417 A (HASCOET et al.) 02 January 1996, entire document.			1-63
•	OU STOUTE IT (EMBOODE & ME) OF SMINNEY 1990, CHAIN WOODINGH.			
Y	US 6017361 A (MIKUS et al.) 25 January 2000, entire document.			1-63
Y	US 5370675 A (EDWARDS et al.) 06 December 1994, entire document.			1-63
•				
' <u> </u>			1	
! 				
				1
	į į			•
	· ·		J	
Ì				
1			ł	•
Further documents are listed in the continuation of Box C. See patent family annex.				
* S	Special categories of cited documents:	"T" later document	published after the inte	rnational filing date or priority
"A" document	t defining the general state of the art which is not considered to be	date and not in principle or the	conflict with the applications underlying the inve	ation but cited to understand the ntion
of particular relevance				
"E" earlier application or patent published on or after the international filing date "X" document of particular relevance; the claimed invelor considered novel or cannot be considered to involve the considered the considered to involve the considered the				red to involve an inventive step
when the document is taken alone				•
"L" document	t which may throw doubts on priority claim(s) or which is cited to the publication date of another citation or other special reason (as	"Y" document of particular relevance; the c		
specified)		considered to involve an inventive ste		when the document is
"O" documen	a referring to an oral disclosure, use, exhibition or other means		combined with one or more other such documents, such combination being obvious to a person skilled in the art	
		-	•	
	at published prior to the international filing date but later than the	"&" document men	nber of the same patent	ramuy
priority date claimed Date of mailing of the international search report				
Date of the a	actual completion of the international search	Date of mailing of the international search report 0.8 DEC 2003		
25 Novembe	er 2003 (25.11.2003)	$\Lambda \cap 0$	DIO	·5
Name and mailing address of the ISA/US		Authorized officer	1/2	
Mail Stop PCT, Attn: ISA/US		ANDRES KASHINH	KOW	
	mmissioner for Patents D. Box 1450			
	O. Box 1450 exandria, Virginia 22313-1450	Telephone No. 703-3	308-3880	
i .	o. (703) 305-3230		·	

Form PCT/ISA/210 (second sheet) (July 1998)